

Atty. Dkt. No. 039153-0683 (H1721)

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of manufacturing an integrated circuit substrate including a strained layer, the method comprising:
 - providing a base layer;
 - providing an insulating layer above the base layer;
 - providing a semiconductor layer above the insulating layer; and
 - forming a plurality of pillars in the base layer, the pillars extending in a direction closer to perpendicular than parallel to the base layer, wherein the pillars have a height greater than a width, and wherein the base layer includes a top surface, the top surface being opposite the base layer and for including active components.
2. (Original) The method of claim 1, further comprising providing a compressive material in apertures associated with the pillars.
3. (Original) The method of claim 2, further comprising planarizing the compressive material until the base layer is reached.
4. (Original) The method of claim 1, wherein the semiconductor layer includes silicon.
5. (Original) The method of claim 1, wherein the insulative layer includes silicon dioxide.
6. (Original) The method of claim 1, wherein the base layer includes silicon.

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7. (Original) The method of claim 1, wherein the pillars have a width of 2000-3000 Å.
8. (Original) The method of claim 1, wherein the compressive material includes nitride.
9. (Currently Amended) A method of forming a strained semiconductor layer above a base layer, the method comprising:
etching a plurality of trenches in the base layer; and
providing a compressive material in the trenches, wherein the trenches extend generally perpendicular to the base layer, wherein the strained semiconductor layer has a top surface for active devices, the top surface being opposite the base layer.
10. (Original) The method of claim 9, further comprising providing a liner in the trenches.
11. (Original) The method of claim 10 further comprising providing a mechanical compressive force on the base layer.
12. (Original) The method of claim 9, where the trenches are in a waffle pattern.
13. (Original) The method of claim 9, wherein the compressive material is a low thermal resistance material.
14. (Original) The method of claim 9, wherein the compressive material includes nitride.
15. (Original) The method of claim 9, wherein a buried oxide layer is between the base layer and the strained semiconductor layer.
16. (Original) The method of claim 9, wherein the semiconductor layer is silicon.
- 17-20. (Cancelled)

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21. (Currently Amended) A method of making a strained substrate, the substrate ~~including a strained layer and a base layer below the strained layer~~, the method comprising:
providing a substrate having a top surface for active devices; and
forming trenches on a side opposite the ~~strained layer~~ top surface, the trenches inducing stress in the substrate to form a strained layer.

22. (Previously Presented) The method of claim 21, wherein the strained layer is a strained silicon layer.

23. (Previously Presented) The method of claim 21, further comprising providing compressive material in the trenches.

24. (Currently Amended) The method of claim 21, further comprising providing a buried oxide layer between ~~the~~ a base layer and the strained layer.